

Claims Status

1. (Currently Amended) A processing system ~~process~~ for treating waste products discharged in a waste water from an animal containment operation, comprising:

reservoir means for receiving the waste water and permitting solids to accumulate at the bottom thereof;

conveyor means for transferring solids from said bottom at a rate preventing agitation of the waste water, said conveyor means including a belt carrying said solids of a porosity permitting drainage of water content therein without allowing passage of solid material therethrough; compaction means for receiving said solids from said conveyor means and for compressing said solids for removing additional water content therefrom;

pulverizing means for receiving said solids from said compaction means and reducing the solids to particulates;

a product dryer having an interior compartment for receiving said solids from said pulverizing means;

heating means associated with said product dryer for heating said solids to an elevated temperature sufficient to substantially remove the remaining water content therein, reduce bacterial and pathogenic content therefrom, and evolve an exiting vapor content; and

circulation means fluidly connected between said heating means and said reservoir means for heating said waste water to an elevated temperature.

2.(Currently Amended) The processing system ~~process~~ as recited in claim 1 wherein said heating means includes heating coils in said interior

compartment connected with said circulation means for effecting said elevated temperature to heat said solids.

3.(Currently Amended) The processing system process as recited in claim 2 wherein said circulation means is fluidly connected from said heating coils to an ammonia separator for spray delivery of heated waste water therein, said separator including a drain line for returning said waste water to said reservoir means.

4. (Currently Amended) The processing system process as recited in claim 3 including conduit means for routing said gaseous products from said product dryer to said separator.

5. (Currently Amended) The processing system process as recited in claim 4 including vent means for exhausting gaseous products from said separator, and condensing means for liquefying said gaseous products.

6. (Currently Amended) The processing system process as recited in claim 2 wherein said product dryer includes a reciprocating dryer bed for receiving said product from said pulverizing means at an entrance location and for transferring and agitating said solids for discharge and an exit location to a product holding area in said product dryer.

7. (Currently Amended) The processing system process as recited in claim 6 wherein said dryer bed includes a vertical series of reversely inclined bed effecting to transfer said product from said entrance location to said exit location.

8. (Currently Amended) The processing system process as recited in claim 1 including filter means in said circulation means for filtering said waste water prior to return to said reservoir means.

9. (Currently Amended) The processing system process as recited in claim 1 wherein said waste water from said animal containment operation is

obtained from a flushing reservoir, wherein said flushing reservoir is fluidly connected with said reservoir means.

10. (Withdrawn) A dryer for agricultural materials, comprising: an insulated enclosure having an interior compartment having an entrance and an exit; heating means for heating said interior compartment to an elevated temperature; transfer means for loading the agricultural material into said interior compartment at said exit; means for transferring said agricultural material within said interior compartment between said entrance and said exit; and means for removing said agricultural material from said exit after predetermined thermal treatment thereof.